

Original Article

LAPAROSCOPIC CHOLECYSTECTOMY AS DAY CASE SURGERY

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Objective: To assess the feasibility of performing Day Case Laparoscopic Cholecystectomy (Lc) in selected cases at Shalamar Hospital Lahore by one surgeon.

Material & Methods: Patients having gall stones, chronic cholecystitis were admitted under care of one surgeon in this study at 8 am in the morning. Selection criteria for this study included (ASA) American Society of Anesthesiologists grade of I or II, age below 40 years, well counselled about operation and post operative care, responsible career at home, contact number for advice. All patients were advised to attend out patient clinic 3 days post op. All patients were discharged about 8pm to 10 pm same day.

Results: From February 2005 to February 2009 (4 years period) 70 patients were admitted for Laparoscopic cholecystectomy as a day case. All were discharged home at night. Two patients required an overnight stay (2.8%); there was no conversion to open procedure. One patient was re-admitted after midnight for pain and one patient was re-admitted next day for vomiting (2.8%). 68 patients were fully satisfied with day case procedure. (%)

Conclusion: Day case laparoscopic cholecystectomy is a safe procedure in fit, sensible, educated patients if they have responsible care-giver at home.

Key Words: Laparoscopic Cholecystectomy

Introduction

Laparoscopic cholecystectomy is now considered treatment of choice for symptomatic gall stones. Laparoscopic cholecystectomy as a day case was first performed and recognized in 1990. There are very few true day case surgery reports as some units do 23 hour Laparoscopic cholecystectomy with overnight stay. In this study true day case Laparoscopic cholecystectomy is performed as the patient stays in the hospital only 12 to 14 hours. In this study feasibility of true day case Laparoscopic cholecystectomy is done.

Material and Methods

A prospective study was carried out on selected patients for Laparoscopic cholecystectomy, between February 2004 to February 2009. Indications for surgery were symptomatic gall stones, confirmed on ultrasonography. All patients were selected by one surgeon. Patients with age of 40 years and below, absence of jaundice, normal LFTs, normal PT, APTT, normal pulmonary function, controlled hypertension, absence of morbid obesity and no acute cholecystitis were selected. All patients were admitted in either private rooms or ward on morning of the operation.

Patients requiring Lc were placed first case on list. Only one day case LS were done on one list. Operation was performed using standard 4 ports

technique with CO₂ peritoneal insufflation of abdominal pressure 14-15 mm Hg. All procedures (Lc) were performed by one surgeon. No drain was used in any case. Single dose prophylactic antibiotic was given I/V at anesthetic induction. All patients were given I/V anesthesia; nalbin with antiemetic was used as post op analgesia.

One hour before discharging home I/V analgesia was given to patient and then discharged with oral analgesia. Patients were advised oral fluids 6 hrs after operation or some soft, light diet before discharge.

Patient were sent home once fully conscious, ambulant, having no nausea or pain. On discharge, patient's attendants were given information about pain control and other complications and were advised to discuss with surgeons on phone. If no problem at home, patents were advised to see the surgeons at clinic 3 days post op.

Results

A total of 70 patients were considered and operated for Lc over 4 years period. F:M ratio was 4:1. The median age of patients was 30 yrs (20-40yrs). No patients required an overnight stay. There was no conversion to open.

No peritoneal drain was used in any case. One patient (1.4%) was readmitted same night with pain & discharged next morning. One patient was readmitted (1.4%) next day with pain and was

Reason for Readmission

Pain 1(1.4%)
 Nausea and vomiting 1(1.4%)
 All patients except 2 (2.85%) were satisfied and were happy with day case LC.

Discussion

This study supports that LC is safe and useful even if done as a day case. But this study is done on very selective patients. There are lot of studies on Day Care LC where patients are kept overnight and discharged in 23 hrs. If the benefits of day case LC in Pakistan are considered, it does not make any difference whether patient is kept overnight or discharged as a true day case. It does not effect the cost of operation for day case. All patients cannot be considered for day case surgery especially those with

uncontrolled DM, HTN, ischemia heart disease, COPD, morbid obesity or acute cholecystitis. Age is not a factor if patient is ASA I or II. These are high risk patient and it is better not to include them for Day Case Surgery. However present study has proved that true Day Care Surgery (LC) can be performed in selective number of patients (urban not rural) without any danger.

Conclusion

Day case laparoscopic cholecystectomy is a safe procedure in fit, sensible, educated patients if they have responsible caregiver at home.

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References

- Nathanson IK, Fsater DW, Cuschieri A. Laparoscopic repair/peritoneal toilet of perforated duodenal ulcer. *Surg Endosc* 1990; 4: 232-233.
- Mouret P, Francois Y, Vignal J, Brath X, Lombard-Plater R. Laparoscopic treatment of perforated peptic ulcer. *Br J Surg* 1990;77:1006.
- lau WY, Leung KI, Kwong KH, Davery IC, Roberston C, Dawson JJ et al. A randomized study comparing laparoscopic versus open repair of perforated peptic ulcer using suture or sutureless technique. *Ann Surg* 1996;224:131-8.
- Druart Mi, Van Hee R, Etienne J, Cadiere GB, Gigot JF, Legrand M et al. Laparoscopic repair of perforated duodenal ulcer. A prospective multi center clinical trial. *Surg Endosc* 1997;11:1017-20.
- Siu WI, Leong HT, Law BKB, Chau CH, Li CAN, Fung KH et al. Laparoscopic repair for perforated peptic ulcer a randomized controlled trial. *Ann Surg* 2002;235:1313-9.
- Sui WT, Leong HT, Li MKW. Single stitch laparoscopic omental patch repair of perforated peptic ulcer. *J R Coll Surg Edinb* 1997;42:92-4.
- Chung SC, Li AK. Helicobacter pylori and peptic ulcer surgery. *Br J Surg* 1997;84:1489-90.
- Koo J, Ngan YK, Lam SK. Trends in hospital admission, perforation and mortality of peptic ulcer in Hong Kong from 1970 to 1980. *Gastroenterol* 1983;84:1558-62.
- Crofts TJ, Prk KGM, Dtrrl RJC, Chung SS, Li AKC. A randomized trial of non-operative treatment for perforated peptic ulcer. *N Engl J Med* 1989;320:970-3.
- Lanas A, Serrano P, Bajador E, Esteva F, Benito R, Sainz R. Evidence of aspirin use in both upper and lower gastrointestinal perforation. *Gastroenterol* 1997; 112: 683-9.
- Ng EK, Lam YH, Sung U, Yung MY, To KF, Chan AC et al. Eradication of Helicobacter pylori prevents recurrence of ulcer after simple closure of duodenal ulcer perforation: randomized controlled trial. *Ann Surg* 2000;231:153-8.
- Ng EK, Chung SC, Sung JJ, LM YII, Lee DW, Lau JY et al. High prevalence of helicobacter pylori infection in duodenal ulcer perforations not caused by non-steroidal anti-inflammatory drugs. *Br J Surg* 1996; 83: 1779-81.
- Cuschieri A. Whither minimal access surgery: tribulations and expectations. *Am J Surg* 1995; 169:9-19.
- Darzi A, Cheshire NJ, Somers SS, Super PA, Guillou PJ, Monson JR. Laparoscopic omental patch repair of perforated duodenal ulcer with an automated stapler. *Br J Surg* 1993;80:1552.
- Costalat G, Dravet F, Noel P, Alquier Y, Vernhet J. Coelioscopic treatment of perforated gastro-duodenal ulcer using the ligamentum teres hepatic. *Surg Endosc* 1991;5:154-5.
- Pescatore P, Halkic N, Calmes JM, Blum A, Gillet M. Combined laparoscopic-endoscopic method using an omental plug for therapy of gastro-duodenal ulcer perforation. *Gastrointest Endosc* 1998;48:411-4.
- Lagoo SA, Pappas TN. Laparoscopic repair for perforated peptic ulcer *AM Surg* 2002;235:320-1.